

**Please amend the claims of is application to as follows:**

**Amended Claims**

**Claims 1.-7. (Cancelled)**

**Claim 8. (Currently amended)** The enthalpy extractor system of claim 7 and including a flow meter, operatively connected with the control unit, to determine the quantity and capacity of vapors being returned to the underground storage tank.

**Claim 9. (Cancelled)**

**Claim 10. (New)** An enthalpy extractor system for hydrocarbon vapors as stored within an underground storage tank that includes an upper vapor section and for use in conjunction with a fuel dispensing system including at least one dispenser, and nozzle, for dispensing of fuel, and including a vapor return line for returning vapors from the dispensing area back to an underground storage tank, said system including an underground storage tank, a vapor return line communicating with the underground storage tank to provide for return of vapors from the location of fuel dispensing, a vent pipe operatively associated with the underground storage tank to provide for venting of excessive vapors, a refrigeration unit operatively associated with the underground storage tank, said refrigeration unit includes a heat exchanger that is located within the upper vapor section of the underground storage tank, said refrigeration unit providing for the operations of said heat exchanger to condense hydrocarbon vapors stored within the vapor section of the underground storage tank, a control unit operatively associated with the refrigeration unit to provide for its initiation and shut-off of operations during performance of the system, a pressure sensor located within the vapor section of the underground storage tank to provide for the detection of

pressure within the vapor storage area to determine the level of vapor pressure, and to provide a signal to the control unit to initiate operations of the refrigeration unit, such that any vapors returned and stored within the underground storage tank will be control chilled by said heat exchanger to condense the hydrocarbon vapors and thereby reduce the pressure of vapors that are stored within the underground storage tank.

**Claim 11. (New)** The enthalpy extractor system of claim 10, and including an additional refrigeration unit system operatively associated with at least one of the vent pipe and vapor return line to effect a chilling and condensing of any vapors located therein, for return back to the vapor section of the underground storage tank.